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## **CLAIMS**

- 1. A method for treating or ameliorating a condition selected from:
- (a) hepatic or cardiac or brain ischemia-reperfusion injury;
- (b) pulmonary hypertension; or
  - (c) cerebral artery vasospasm,

in a subject by decreasing blood pressure and/or increasing vasodilation in the subject, the method comprising administering sodium nitrite to the subject to decrease the blood pressure and/or increase vasodilation in the subject, thereby treating or ameliorating the condition.

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- 2. The method of claim 1, which is a method for treating or ameliorating hepatic or cardiac or brain ischemia-reperfusion injury.
- The method of claim 2, wherein administering sodium nitrite to the subject is intravenous.
  - 4. The method of claim 2 or 3, wherein the sodium nitrite is administered to a circulating concentration of about 0.6 to 240  $\mu$ M.
- 5. The method of claim 1, which is a method for treating or ameliorating pulmonary hypertension.
  - 6. The method of claim 5, wherein the pulmonary hypertension is neonatal pulmonary hypertension.

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- 7. The method of claim 5 or 6, wherein administering sodium nitrite to the subject is by inhalation.
  - 8. The method of claim 7, wherein the sodium nitrite is nebulized.

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- 9. The method of any one of claims 5 through 8, wherein the sodium nitrite is administered at a rate of 270 µmol/minute.
- The method of claim 1, which is a method for treating or ameliorating cerebral artery vasospasm.
  - 11. The method of claim 10, wherein administering sodium nitrite to the subject is intravenous.

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- 12. The method of claim 10 or 11, wherein the sodium nitrite is administered at a rate of about 45 to 60 mg/kg.
- 13. The method of any one of claims 1-12, wherein the sodium nitrite is administered in combination with at least one additional agent.
  - 14. The method of any one of claims 1-13, wherein the subject is a mammal.
  - 15. The method of any one of claims 14, wherein the subject is a human.

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